Exhibit B
Deposition transcript of
Plaintiff's Expert Witness
Of Hendik Bessembinder

ORIGINAL TRANSCRIPT

UNITED STATES DISTRICT COURT

FOR THE SOUTHERN DISTRICT OF NEW YORK

U.S. COMMODITY FUTURES TRADING COMMISSION,	) Deposition of:
Plaintiff,	) **HENDRIK BESSEMBINDER**
vs.	)
ERIC MONCADA, BES CAPITAL, LLC, and SERDIKA, LLC,	) Civil No. 12-CV-8791
Defendants.	)

December 4, 2013 * 9:08 a.m.

Location:
United States Securities and Exchange Commission
Salt Lake District Office
15 West South Temple, Suite 1800
Salt Lake City, Utah 84101

Reporter: Reporter: Kathy Morgan, CSR, RPR
Utah License No. 259764-7801 Nevada License No. 357
Notary Public in and for the State of Utah

A P P E A R A N C E S

FOR THE PLAINTIFFS:

Andrew Ridnour, Trial Attorney
Jennifer Diamond, Trial Attorney
UNITED STATES COMMODITY FUTURES
TRADING COMMISSION
Division of Enforcement
1155 21st N.W. Washington, D.C. 20581
Tel: 202.418.5244
jdiamond@cftc.gov

Present via teleconference:

Ken McCracken, Chief Trial Attorney
UNITED STATES COMMODITY FUTURES
TRADING COMMISSION
Division of Enforcement
1155 21st N.W. Washington, D.C. 20581
Tel: 202.418.5244
kmccraken@cftc.gov

FOR THE DEFENDANTS:

Richard M. Asche
LITMAN, ASCHE & GIOIELLA, LLP
140 Broadway
New York, Yew York 10005
Tel: 212.809.4500
Fax: 212.742.8757
richardasche@lagnyc.com

I N D E X

E X H I B I T S

P R O C E E D I N G S

HENDRIK BESSEMBINDER

called as a witness, being first duly sworn,
was examined and testified as follows:

EXAMINATION

BY MR. ASCHE:

Q. Good morning, sir.
A. Good morning.
Q. I'll try to get you in and out of this as fast as we can. Would you just, for the record, just state your name and your business address.
A. Yeah. So my name is Hendrik Bessembinder. My business address is David Eccles School of Business, University of Utah, Salt Lake City, Utah.
Q. Did you prepare an expert report in the matter of CFTC versus Moncada?
A. I did, yes.
Q. Do you have a copy of that report with you?
A. I do not.
Q. Oh, you don't?
A. I don't.
Q. I, unfortunately, brought only my copy.
MR. ASCHE: Can you give that to the

witness?

THE WITNESS: Thank you.

MR. ASCHE: And could we mark that? Why don't we mark that as Bessembinder Exhibit 1.

(EXHIBIT 1 WAS MARKED.)

Q. (By Mr. Asche) Is Exhibit 1 a copy of the expert report which you prepared?

A. I have not gone through it page by page, but it does appear to be my report.

Q. If you look at page 34, is that your signature?

A. That is my signature, yes.

Q. When were you retained by the CFTC to prepare an expert report?

A. I don't think I can give the exact date. It would have been approximately late February of this year.

Q. And were you retained pursuant to a written retainer agreement?

A. There is a contract in place.

Q. Do you have a copy of that with you?

A. No.

Q. Without holding you to the exact terms of the contact, are you being compensated on an hourly basis?

A. Yes, an hourly basis.

Q. And does the rate of compensation change depending on whether you're testifying or researching?

A. No. Single flat rate.

Q. And what is that rate?

A. $525 per hour.

Q. Now, on page 1 of your report near the bottom.

A. Yes.

Q. You state that you "served as a consultant on issues relating to financial and commodity markets for private and governmental clients." Do you see that?

A. I do.

Q. And you list FINRA?

A. Yes.

Q. Have you done any work for FINRA in connection with commodities?

A. No. My work with FINRA was regarding so-called structured products, debt securities.

Q. And with respect to the New York Stock Exchange, have you done any consulting work in connection with commodities?

A. No. The New York Stock Exchange, of

course, is an equity market.
Q. Okay. The DOJ?
A. Those were commodity-related matters, some equity, some commodity.
Q. And when did you perform those services?
A. My first work with DOJ was as far back as '95 or so. Commodity work was more recent. I couldn't give an exact date, but five, seven years ago, something like that.
Q. And what was the nature of the work that you did for DOJ five to seven years ago?
A. I'm somewhat limited in what I can discuss, but it involved potential manipulation of commodity prices.
Q. Was it in connection with litigation?
A. There was an investigation. I'm not sure that it ever went to formal charges from DOJ, in any event. It was an investigation, I think is the accurate way to put it.
Q. And I take it you're not at liberty to disclose the name of the subject of that.
A. That's correct.
Q. Did you generate any kind of a written report for the DOJ?
A. In that matter, no.

Q. What have you done for the CFTC?
A. I've done a few cases for CFTC, all commodity cases, some manipulation cases, some price reporting cases.
Q. Did any of those result in your testifying in court?
A. Yes. The Placido case just about a decade ago.
Q. Since the Placido --
MR. RIDNOUR: It's DiPlacido, D-i.
MR. ASCHE: DiPlacido, D-i-P-l-a-c-i-d-o.
Q. (By Mr. Asche) And since that case, have you testified in any form for the CFTC?
A. No, nothing else has gone to trial, not that I've worked on.
Q. How about depositions?
A. Yes, I did a deposition for the CFTC six or seven years so, in this very building, as a matter of fact.
Q. What kind of case?
A. That was a price reporting case. The question was whether certain traders had accurately reported prices to plats.
Q. So manipulation by price reporting?
A. I'm not sure if "manipulation" was the

label that was used or not.

Q. And were you -- what was the nature of your opinion that you held? I don't need to know the exact opinion, but what was the nature, the subject matter of the opinion?

A. I would characterize it as a financial economist clarifying why false reporting of prices is a bad thing from an economic viewpoint.

Q. And that matter never went to trial?

A. Not that I know of. I don't think it did.

Q. Since that occasion six or seven years ago, have you testified on behalf of the CFTC?

A. No.

Q. What work have you done for the attorney generals or the attorneys general of the New York area and California?

A. Those were matters quite distinct from each other. The Attorney General of the State of New York case involved the compensation of the New York Stock Exchange chairman.

Q. Mr. Phelan?

A. No.

MR. RIDNOUR: Grasso?

Q. (By Mr. Asche) Grasso, yes.

A. Grasso. The case got a fair amount of

press, so that was my work for the -- and I'm not a compensation expert.

Q. You believe he was undercompensated?

A. Not necessarily. I'm not a compensation expert. My work in that case was related to the performance of the exchange itself during his watch. In any event, that was the Attorney General of New York. The Attorney General of California was actually a tax case involving the use of controversial tax shelters to avoid tax liability, and I was involved -- the tax shelter involved complex trading strategies, so my expertise was in terms of the trading strategies that were used and the economics of the trades.

Q. And for Goldman Sachs or for Interactive Data Corporation?

A. Interactive Data Corporation, that was a nonlitigation matter. They were considering acquisition of another firm, and I was involved in their due diligence of evaluating the potential acquisition.

Q. And Goldman Sachs?

A. I worked with them on strategies for quantifying trade execution costs.

Q. Attached to your report is a CV, a résumé,

which lists publications.

A. Yes.

Q. Could you just go down the list and identify publications that -- the subject of which is manipulation of any securities markets.

A. None of my published work is focused on manipulation in particular.

Q. Would you just go down the list and list any published works that deal with the commodities markets.

A. Well, some of them deal with issues that are germane to commodities as well as equities. Then there are some that focus on commodities in particular. So in the first category, the second and third publications listed, "Noisy Prices and Inference Regarding Returns," "Liquidity Biases in Asset Pricing Tests," the issues there are statistical issues, but they apply to data from any financial market.

Which ones focus on commodities in particular, there's two papers about electric power markets, one published in *Journal of Business*, one published in *Journal of Finance*. There's several papers with futures markets in the title, and those papers in general included an array of commodities

within the study. I can point out the particular ones if you wish.

Q. If you can.

A. So I might be missing some, but the ones that in particular would -- I'm quite sure from memory -- would include commodities would be near the bottom of the second page, "An Empirical Analysis of Risk Premia in Futures Markets," "Price Volatility, Trading Volume and Market Depth: Evidence from Futures Markets."

Over to the third page, "Systematic Risk, Hedging Pressure and Risk Premiums in Futures Markets," "Time Varying Risk Premia and Forecastable Returns in Futures Markets," those all included commodities, if my memory's correct. And again, I may have missed one or two in the sense that one or two more may have included commodities.

Q. But futures markets would include any security, I take it?

A. Yeah. I mean, some of those studies would have also had financial futures in the study, along with commodity futures.

Q. Right. And equity futures as well?

A. I'm not remembering exactly what was in every individual study, but some of the studies would

have had equity futures along with commodity futures.

Q. Your résumé lists work for FERC, which may be a dirty word in this room, but...

A. I thought all the government agencies all got along very well.

Q. Maybe they're a dirty word with me. What have you done for them?

A. FERC, I was involved in, I think the label they used was the Western Markets Investigation, but to most of the world it would be known as the Enron investigation.

Q. And specifically what did you do?

A. So around the time of the controversy related to Enron, FERC was charged by Congress with investigating various aspects of energy trading, particularly in the Western U.S. FERC assembled a team of consultants and academics and collectively carried out that investigation. It's been more than a decade, so I have to think a little bit about where I was most involved.

I recall trying to work to quantify Enron's profitability. I recall some assessment of whether Enron may, at various times, have attempted to manipulate natural gas markets. I feel like I'm missing something in the sense that I contributed to

other aspects, but sorry, it's not fresh in my memory.

Q. Have you traded commodities?

A. No. I'm an academic, not a trader.

Q. On page 2 of your report, at the bottom of paragraph 3, you state that you have examined -- I assume examined a longer time period. Do you see that?

A. Yes, I do see that.

Q. What time period did you examine?

A. The specific dates are laid out within the report, but going from memory, it was from some point in August through the end of November of 2009.

Q. Did you look at any records for any period prior to August 2009?

A. No.

Q. Or after the end of November?

A. No.

Q. So it was only on this one product, December wheat, that you focused?

A. Correct.

Q. You conclude in paragraph 4 that Mr. Moncada "did not enter the large lot orders with intention that they generate trades." Do you see that?

A. That's correct.

Q. But, in fact, some of them did generate trades; correct?

A. There were some trades generated, yes.

Q. And I think in your report you say that the average time between entering the order and cancellation of the order was on the order of 2.4 seconds?

A. I believe that's about correct, yes.

Q. And is it fair to say that that's ample time for someone to hit his orders?

A. Someone could react in two seconds, yes.

Q. Someone could react in one second; correct?

A. I believe so, yes.

Q. And automatic trading programs could react in a fraction of a second; correct?

A. I believe that's correct, yes.

Q. And maybe a millisecond?

A. Yes.

Q. And did you learn in the course of your work whether Mr. Moncada used an automatic algorithmic method of entering orders or did it by hand?

A. The only direct evidence I have is a field

that was in with what I refer to as the "lag files." But there was a field that delineated use of -- I believe the phrase was "autospreader," and then a manual entry. So my understanding is he had both manual and automated entry options.

Q. Do you know whether any of the cancellations were accomplished via some algorithmic method?

A. I'm not certain of that.

Q. Would that be relevant to your conclusion concerning his intention?

A. Not particularly.

Q. Is it fair to say that someone who wanted to enter an order and cancel it before it could get hit, it would be more effective to use an automatic device as opposed to do it by hand?

A. Well, effective can't be judged without an understanding of what the trader's intentions were.

Q. It would be faster; correct?

A. Certainly -- I would certainly think he could have cancelled even faster than two seconds if he had wished to.

Q. And he could have cancelled even faster if he'd used an algorithmic method as opposed to doing it by hand?

A. Presumably.
Q. Much faster; correct?
A. I would anticipate that he could have entered and cancelled within microseconds if he had wished to.
Q. On page 3 in paragraph little (i) you state that 710 large lot orders were entered by Moncada on the eight charge dates and 143 by other market participants combined. Do you see that?
A. Yes.
Q. Did the 143 large lot orders by other market participants include orders by other market participants that were entered via the Iceberg method?
A. I would not be able to tell. I can clarify, if you wish, about why, why I couldn't tell.
Q. Yes, please.
A. The data that I received from the Chicago Board of Trade did not contain a field that would allow me to identify which orders were Iceberg orders and which are not. The only data set that clarified that was what I referred to as the "lag files," and the lag files were pertaining to the two firms that Moncada was affiliated with. So I didn't have that data for the broader set of traders.

Q. So there may have been an unlimited number of traders who wanted to trade in large lot quantities but did it via Iceberg; correct?
A. Well, it couldn't be unlimited, given there was only 143 of such orders entered by all the rest of the traders out there.
Q. But the 143 orders for all the rest of the traders don't include Iceberg orders; correct?
A. I don't think that's correct. The database does not flag Iceberg orders, but I'm not sure. Your question seems to presume that the database excludes Iceberg orders, and I'm not sure if that's the case or not.
Q. Well, an Iceberg order would show up on the database as an order of 20, and then an order of 20, and then an order of 20, et cetera; correct?
A. Well, there's an issue of what's displayed to the world and there's an issue of what's recorded by the exchange, and those are not necessarily the same.
Q. Well, do you know in this case whether the 143 large lot orders included orders that were entered via the Iceberg method a few contacts at a time?
A. So if I understand your question

carefully -- sorry -- if I understand your question correctly, you're asking do I know whether the 143 orders includes or excludes large Iceberg orders?

Q. No, not large Iceberg orders. Yeah, Iceberg orders, no one of which would be a large lot order. But in the aggregate, in other words, if a trader wanted to buy or sell 200 contracts, but he entered the orders 20 contracts at a time, would those transactions be included in your 143 large lot orders?

A. No, not for Moncada and not for other traders. The large lot orders were defined by me as orders where the individual order was 200 contracts or more, not an accumulation.

Q. And do you have any idea of what percentage of trades where a trader wanted to accumulate or sell 200 lots or more were accomplished via the Iceberg method?

A. No. As I said, other than the data pertaining to the two firms that Moncada was associated with, I do not have anything that identifies Iceberg orders for me.

Q. And I believe you intimate or you say in your report that the Iceberg method is a more effective method of accumulating or disposing of

large numbers of contracts?
A. In general, what I had to say about Iceberg orders is they can be effective for getting your trades done without moving the price unduly.
Q. So there may have been a large number of traders who entered Iceberg orders for large lots, but did it in small increments that are not captured by this data; is that correct?
A. I think we're using the word "large lot" differently. Again, I'm referring to "large lot" to mean 200 or more contracts in a single order.
Q. Correct, and I understand that. What I'm saying is that there may have been traders who wanted to buy or sell 200 or more contracts at the same time, but did it by the Iceberg method of entering smaller orders sequentially?
A. So when you say "smaller orders," do you mean smaller displayed to the world orders?
Q. Correct.
A. In any event, the answer is it's certainly possible, if somebody wanted to accumulate a big position and used many small orders rather than one big order. That's certainly possible.
Q. And you have stated in here that that is an effective method of buying or selling large

numbers of contracts?

A. Well, what I did say is that you -- electing to use the Iceberg method, based on economic reasoning in my analysis of an equity market that has a similar option can be an effective method of getting trades executed without moving the market as much as you would if you exposed your orders.

Q. So the only trades encompassed in the 143 large lot orders by other marketing participants were trades of 200 or more contracts entered at the same time not via the Iceberg method?

A. Or orders of 200 or more. Trades are separate, a separate issue, yeah.

Q. Separate issue.

A. Orders of 200 or more, and again, on the last part I'm not certain because I'm not certain -- again, the fact that something was not displayed to traders in realtime is not necessarily the same as saying that it was not recorded by the exchange in their database. So I'm using an exchange database, so an Iceberg order says you don't display this to the world in realtime, other than the tip of the Iceberg, but that doesn't necessarily mean it's not in the database.

Q. You don't know?

A. I don't know.
Q. You testified that Moncada cancelled his large lot orders quickly as compared to other market participants; correct?
A. That's correct, yes.
Q. And is a cancellation rate of 99.6 percent, which you say that Moncada -- that includes cases where he would enter a large lot order, cancel it, enter another one, cancel it, enter another one, cancel it, all in a very short period of time; is that correct?
A. That's correct. In the scenario you just laid out, that would be three entries, three cancellations.
Q. And he might have done that in response to market movement; correct?
A. I mean, nobody but him knows for sure why he followed the strategies he did.
Q. Correct. But that's one possibility --
A. So better to pose that question to him than to me.
Q. But that would be one possible explanation?
A. It's within the realm of reason that a trader would cancel an order in response to what they

saw in the market.

Q. And he might do it very quickly and very often, depending on what he saw in the market?

A. Might. Well, I'll go along with the word "might."

Q. Well, you're trying to reach conclusions about what he intended; correct?

A. I am, based on what he did.

Q. And I'm trying to suggest that there were other motivations that were possible. Would you agree with that?

A. Neither you or I is a mind reader. My conclusions are based on what he did.

Q. Okay. But what he did, that is, to cancel rapidly and reenter orders, might well have been based on a response to market conditions; correct?

A. Pure conjecture. Maybe. Who knows?

Q. Okay.

A. In some cases.

Q. Now, if Moncada placed a large lot order at a price, and the market -- let's say it was an order to buy at 500, and the market went down from 500, would it be likely that anyone would buy his large lot order at 500?

A. So if I understand your scenario, he's put

in an order. He's put in an order to buy at a given price. The market has dropped.

Q. Right.

A. I mean, nobody's going to pay above market, if that's your question.

Q. Yeah. If the market goes up from there, people will buy at 500 from him; correct?

A. They might. I mean, you know, if an order's the best on the book, it might get hit, it might not.

Q. Well, if there is a demand for commodity at a price and someone is offering to buy it -- someone's offering to sell it at a lower price, isn't it likely that it's going to get sold?

A. All I can say is if you have the best price, you may get hit, you may not. But you're certainly more likely to get hit if you have the best price.

Q. It's certainly a great risk?

A. At risk? I guess it depends on what you have in mind for risk. But if you have the best price on the book, you might get hit.

Q. So if he has a large lot order out there and the market -- a large lot order to buy -- and the market goes down, there's a good chance that someone

will buy his large lot order, and he'll lose the difference between what he sells at and what the -- I'm sorry -- when the market goes down, no one will buy at his price; correct?

MR. RIDNOUR: Object to the form. I think he said he put in a buy order, and then someone else tried to buy his buy order.

MR. ASCHE: Then let me start over and say it again.

Q. (By Mr. Asche) If he has a large lot order to buy at a price.

A. Uh-huh.

Q. And the market goes down, it is certainly likely that other traders will accept his offer and sell to him at his price, which is now higher than the market; correct?

A. Again, you know, how likely is an open question, but again, if he's the best, if he's the best price, the chances that somebody will hit certainly go up.

Q. Okay. And conversely, if he has an order to buy and the market goes up, so he's offering to buy at lower than the market, he's not going to get hit?

A. Less likely to get hit. It would take a

big order to get to him.

Q. Right. So he has, in that circumstance, a risk, but little or no potential for reward; is that correct?

A. I'm not sure I would agree with that. There are certainly times when one could have a trade executed that one would say, "I wish that hadn't happened." That can happen in general.

Q. But if Mr. Moncada employed that reasoning that I just suggested in my question, that would be a reasonable -- that would be a reasonable conclusion for a trade. If he can't make money, if the market moves lower and he has to lose money, or he is at risk of losing money if it moves higher, isn't that a good reason for not leaving that large lot order out there?

A. Well, certainly there are legitimate reasons for cancelling an order.

Q. And that's one of them?

A. The scenario you lay out is a reason that one might want to cancel an order.

Q. Okay. Now, if a trader has a strategy of placing large lot orders and cancelling them quickly and reinstating them so that there are a large number of such orders, isn't it more likely that a smaller

percentage of his orders will get hit than a trader who leaves his order on for an extended period of time?

A. If I understand what you're saying correctly, I think I agree. Rapid cancellations will tend to reduce your execution rate as compared to letting the order sit.

Q. Okay, and why would a trader let an order sit for any length of time, a large lot order?

A. Other things equal, you're going to get a higher rate of execution if you let the order sit.

Q. But you might get a higher rate of execution at a less advantageous price; correct?

A. Well, you set your price, so...

Q. Right, you've set your price, but the market may disagree; correct?

A. Well, no. In some sense disagreement is what makes trades happen.

Q. Correct.

A. I'm willing to buy at a price, you're willing to sell at a price, there must be something different in our motivations.

Q. And are there some traders who are willing to buy at a price or sell at a price at a given instance in time and not two seconds or five seconds

later?

A. I mean, we do see people cancel trades, modify -- sorry -- cancel orders, and we also see a lot of modifications of orders.

Q. Right. By the way, the cancellation rates that you're reporting here, do those include modifications?

A. No. The field says "cancel" on these.

Q. So if Moncada enters an order and cancels it, and trader X enters an order and modifies it, the score is one to nothing Moncada; correct?

A. In terms of counting cancellations, yes.

Q. Okay. Do you have any idea whether and how, to what extent traders other than Moncada would modify large lot orders as opposed to cancelling?

A. I did not quantify that.

Q. Could you?

A. I believe that could be done with the data.

Q. Okay. Is it fair -- I mean, is there a difference in terms of result between placing an order, cancelling it, placing another order at a different price, as opposed to placing an order and modifying?

A. Well, modification keeps you continually

part of the market. Cancellation, obviously you're out of the market for some amount of time.

Q. Okay. So the advantage of cancellation might be to give the trader a chance to look at the market, look at his charts, consult the stars or do whatever else he does to decide --

A. It takes you out of the market for whatever -- for whatever your motivation might be.

Q. Are there traders who are interested in buying or selling large lots who are less price sensitive than other traders? That is, they want the commodity or they want to unload the commodity, and they're not as concerned about a tick or two up or down.

A. In general, some traders are more motivated to get trades done than others.

Q. And would a trader who is more motivated to get a trade done than others tend to keep his offer on longer than one who is more price sensitive?

A. Indeed. If you don't want your trade to get done or are not particularly concerned with it getting done, you would cancel quickly. If you want to ensure it gets done, all things equal, you'd tend to leave it there longer.

Q. And the fact that you're price sensitive

doesn't mean that you don't intend to -- doesn't necessarily mean that you don't intend to effectuate the trade, it just means that you intend to do it at your price, not some other price?

A. Potentially.

Q. On page 4, on paragraph (v), little (v).

A. Yes.

Q. You state that Moncada's actual trades were systematically in the opposite direction of his large lot order. Do you see that?

A. I do.

Q. Were those trades at the same prices as his large lot orders or at different prices?

A. I did not assess whether they were at same or different prices.

Q. Do you know whether, prior to entering the large lot orders, Moncada had positions that were consistent with the large lot orders?

A. I did not quantify his positions prior to entering the orders.

Q. So hypothetically, if Moncada had owned ten contracts and there's a large lot order to buy 200, he then sells ten contracts; that is, the ten contracts he owns?

A. Yes.

Q. That would be an example of what you're talking about in paragraph (v)?

A. That would be an example. My analysis says that, in fact, that's what he typically did.

Q. Yeah, and so -- but wasn't it also true that he typically already was either long or short in the same direction as his large lot order?

A. I didn't quantify that.

Q. Would that be something you'd want to know?

A. Doesn't seem terribly central to me. First of all, it's difficult for me to do without actually seeing his account statements. In other words, I didn't know his overnight positions. That was not necessary for any of the analysis I did, but it would be necessary for the analysis you propose. I don't think it's particularly useful. I think nothing speaks louder about what somebody intends than what they do, and what he did was trade in the opposite direction of his large orders.

Q. But he traded in the opposite direction of existing positions. Wouldn't that be relevant?

A. I guess I don't see the relevance. Whether this was done to liquidate an existing position or put on a new position, in my mind the

key -- the key point, I think, in terms of learning what his intent was from the data, was that he consistently traded in the opposite direction of his large orders.

Q. In your experience, do traders sometimes put in orders to buy at a price and orders to sell at a higher price at the same time?

A. That's sometimes done, yes.

Q. So they're putting themselves in a position where they would trade in the opposite direction of another order?

A. Sorry, I didn't follow that, where you were headed with that.

Q. Okay. Moncada puts in an offer, an offer to buy at 500, and he puts in an offer to sell at 501.

A. Uh-huh.

Q. The offer to sell -- the offer to buy is withdrawn and the offer to sell is hit. That would be an example of what you're talking about; correct?

A. That would be an example, yes.

Q. But there would be nothing wrong with those orders; correct?

A. I'm not sure. I think it depends on what the overall pattern was and what the evidence of

intent is.

Q. Well, say he did it a thousand times, he put in an order to buy at a price and put in an order to sell at a higher price, and he executed one of those orders and not the other. Would there be anything wrong with that strategy?

A. I can't answer that in isolation. It depends on what the overall strategy is and what his intent was.

Q. Well, that's all he did. He would routinely, hundreds of times a day, do that. He would put in large lot orders, cancel them, and then execute a trade in the opposite direction at a different price. Anything wrong with that?

MR. RIDNOUR: Objection; calls for a legal conclusion.

A. Yeah, just what I was going to say. There's both legal and economic issues here.

Q. (By Mr. Asche) Economically, isn't that a reasonable strategy?

A. Reasonable can be in the eye of the beholder. I would want to know what it did, what effect it had on the market. Did it improve the market or degrade the market? As an economist, I would want to know. Then, of course, there's the

question of whether it's legal, which is not for me to decide.

Q. It's not a question of whether it's legal. Is it an indication that he didn't intend to trade?

A. If it's happening again and again and again, it would be consistent with the interpretation that he didn't intend to trade on one side. Nothing speaks louder about intentions than actions.

Q. If he routinely places orders at different prices and the market moves in a direction which leads him to execute one trade and cancel the other, you're saying that that would be indicative of manipulation?

MR. RIDNOUR: Objection; asked and answered.

A. I'm not opining on manipulation. Now, if it was random on the buy side and the sell side, that would be one thing. If it was systematically on one side versus the other, then I would ask, "Well, what's this doing to other people's order strategy? What's this doing to the liquidity in the market? What's this doing to bid-ask spreads? What's this doing to volatility in the market?" Those would all be relevant questions that I would want to assess.

Q. So what did his trading do to liquidity in

the market?

A. Slightly widened the bid-ask spreads around the times that he was entering his large orders.

Q. Slightly by how much?

A. I'd -- report estimates.

Q. Is it fair to say less than a tenth of a penny, on average?

A. There's coefficients in the tables, and right offhand I can't convert that into a penny amount for you. I think it's safe to say moderate, modest effects on the bid-ask spread, on average, across all his orders. Probably table 12 is probably the one you're looking for.

Q. I'm looking at the text here.

A. Okay. Probably page 29.

Q. I think paragraph 62 on page 26.

A. In 62, I think I'm focusing on the level of prices rather than spreads.

Q. Okay. Is it fair to say that for every 1,000 net contract entered by Moncada, the increase was about a tenth of a penny or less?

A. So I'm just reading the paragraph 62 here. So some of the coefficients .096, prices were measured in cents. Those are contracts, so for each

thousand contracts we have an increase of .09 cents, correct, yes.

Q. And --

A. I should clarify that's on average, across all.

Q. And how are wheat contracts quoted? In increments of what?

A. The tick size I've mentioned in here, I'm not recalling offhand.

Q. If I suggest 2-and-a-half cents; is that correct?

A. That sounds correct.

MR. RIDNOUR: I think it's a quarter cent.

MR. ASCHE: I'm sorry, quarter cent.

THE WITNESS: I know I have it written down here somewhere.

MR. ASCHE: See, you can get a witness to say anything.

THE WITNESS: I know I have it written down here at some point.

MR. ASCHE: I think it's a quarter cent.

THE WITNESS: Quarter cent, yeah.

Q. (By Mr. Asche) So the average movement was less than a tick?

A. Per thousand.

Q. Yes, okay. And I think, just again focusing on this area, I believe you looked at it in 10-second intervals up to 30 seconds?

A. I measured things at 10-second intervals, yes.

Q. And essentially between 20 and 30 seconds, there was no impact?

A. That was not true across the board. It was true for -- I need to refresh my memory.

Q. Look at the footnote 26 on page 26.

A. So the footnote 26 refers to the third lag, so there was no evidence of an independent effect at a 30-second lag, so there was a contemporaneous effect, a 10-second lag defect, a 20-second lag defect, but no 30-second lag defect.

Q. And did you measure how long after Moncada put in his large lot orders he traded in the opposite direction? Did you ever quantify the time lag?

A. I mean, there is data in here on that issue. So to back up a little bit, I provided estimates that showed he traded in the opposite direction of his large orders, and then I provided estimates of how big that net effect was, how big was his trading in the opposite direction as greater amounts of elapsed time went by. So we can look at

the specific numbers, if you wish.

Q. Could you find that here in your report, please.

A. Yes.

Q. Look at text first, if you don't mind, so that I can read it.

A. Sure.

Q. Maybe it's easier to look at text than charts. I put myself in that chair, not you.

MR. RIDNOUR: Thank you for your consideration.

A. And not your colleagues. So the specific numbers begin -- the discussion begins around paragraph 40. Specific numbers start to show up by paragraph 42.

Q. (By Mr. Asche) So at the bottom of page 18, you said: "The estimates indicate that within one minute of posting large lot orders, he had traded in the opposite direction an average of 34 contracts."

A. 3.4.

Q. I'm sorry, 3.4.

A. No problem.

Q. And then you go on to talk about five minutes later and 20 minutes later, okay?

A. Correct, yes.
Q. Where do you discuss what happens in the first 20 seconds?
A. Let me look at the table.
Q. And which table is that?
A. It will take me a moment to find it. Table 8 would be the relevant table. So I believe you asked about 20 seconds?
Q. Yes.
A. I don't have 20 seconds in the table. I have 10 seconds and one minute in the table.
Q. So walk me through this table, if you can.
A. So shall we start with the panel A? I think it's the most relevant since it involves the most data and also combines information from the two markets, Kansas City and Chicago. So what we have here is that the first coefficient listed there, negative .59, says that in the same 10 seconds that the large orders were entered, on balance Moncada trades slightly in the opposite direction within the same 10 seconds.
Q. And that would be the period that you say there was some effect on the price?
A. Correct.
Q. Okay, go ahead.

A. So he traded slightly in the opposite direction even in the same 10 seconds that he entered the large order. But we're talking about less than one contract per thousand. He entered a thousand, and on average traded slightly less than one in the opposite direction during the same 10 seconds.

Now, these are cumulative effects, so by 10 seconds later, so now adding in also the trading during the 10 seconds after entering an average of 1.16 contracts in the opposite direction, by one minute later he had traded, on average, 4.8 contracts in the opposite direction, and so on and so forth.

Q. I'm a little confused by "the same 10 seconds." Does that mean within 10 seconds of the large lot trade?

A. No, same 10-second interval. So we've got a 10-second interval. He entered some large lot orders during the 10-second interval, and then I asked what was the change in his position during the same 10-second interval that he entered the large lot orders.

Q. Meaning within 10 seconds of order?

A. No. We have a 10-second period of time, say, from straight noon to 10 seconds after straight noon. During that 10-second period, some orders were

entered, some trades were executed. During the same 10-second interval, he traded slightly opposite --

Q. I'm not -- and why would you use an arbitrary 10-second interval as opposed to starting with the large lot trade as second zero and going 10 seconds after that and then 10 seconds after that, the same as you did in paragraph 62?

A. Well, that seems like a reasonable alternative strategy.

Q. Well, it would at least be able -- enable someone to compare what you said the effect on prices was with his actual trading; correct?

A. I can see why you might want to see that analysis.

Q. But you didn't do it?

A. Not one that has been done.

Q. And did you do any analysis which traced the effect of large lot trading beyond 30 seconds?

A. No. Statistically it becomes very hard to identify an effect over longer periods of time, just because there's other things going on in the market.

Q. Were there occasions where Moncada, subsequent to entering large lot orders, traded in the same direction as the large lot order?

A. I didn't specifically identify them, but I

expect there would be. My estimates are all what holds in the data on average. There can be individual data points that differ from the average.

Q. So more often than not he would trade in the opposite direction. Is that what you're saying?

A. I didn't precisely identify that. It's a slightly different statement from saying that on average he sold, but loosely speaking.

Q. So one isn't the mean and the other --

A. How about if we use the loose word "typically." Typically, he traded the opposite direction.

Q. But not always?

A. Not necessarily always.

Q. And you made no effort to quantify the percentage of times he traded in the same direction or the opposite direction?

A. That was not something I quantified.

Q. And is it fair to say that Mr. Moncada traded pretty heavily? I mean, he entered a lot of trades?

A. He had a lot of orders.

Q. And he executed a lot of trades?

A. Yeah. I mean, I have data on his executions.

Q. So it would be surprising to see Mr. Moncada not executing orders in the minute, two minutes, ten minutes, hour much after a large lot order; correct?
A. I'm sorry? What would be surprising?
Q. To see Mr. Moncada not executing orders in that interval.
A. I guess I'm not sure quite what you're looking for here.
Q. Let me -- you looked at Mr. Moncada's trading pattern; correct?
A. Yeah.
Q. And he would enter many, many trades in the course of an hour?
A. Many, many orders, yes.
Q. And many trades?
A. Yes, he had a lot of --
Q. He executed --
A. -- trades.
Q. -- a lot of trades. And if you looked at any 10-minute slice, it would not be atypical to see him both buying and selling; correct?
A. You know, I didn't precisely quantify that, but I can say, you know, I would not be surprised to see him buying and selling in a given

period of time. He was an active trader.
Q. And that would not even be unusual for an average trader; correct?
A. I guess it depends on the average trader. I think, you know, my sense if there's a lot of traders who just dabble a little bit in the market. But there will be other active traders, and you will find cases where traders are both buying and selling in a given period.
Q. Now, in the 20-second interval that you say there was some effect on price, even though it was less than quantifiable as a bid --
A. I wouldn't agree it's less than quantifiable. It was quantifiable.
Q. Well, it was less than the minimum measurement on the --
A. Per thousand contracts.
Q. Correct.
A. Over the periods where he put in many thousands of contracts.
Q. Yes. So were you able to determine what Mr. Moncada did in that 20-second interval?
A. I'm sorry, which 20-second interval do you have in mind in particular?
Q. The interval that you referred to in

paragraph 62.

A. I can say that on balance he was trading the opposite direction.

Q. Do you know what percentage?

A. I do not know the percentage of times he went the opposite direction. I know that on average, he went the opposite direction.

Q. And you know that for the 20-second period after the large lot orders? There's --

A. Well, we have --

Q. -- the 10 and the 10.

A. Let me refresh my memory on what we had in the table again.

MR. RIDNOUR: For the court reporter's sake, if you could wait until he finishes his questions.

MR. ASCHE: I'm sorry.

THE WITNESS: I have specifically quantified what he did in the same 10 seconds and then what he did in the combination of same 10 seconds and following ten seconds.

Q. (By Mr. Asche) And you said that the effect was -- I don't know whether you used the word "minimal" or "slight."

A. On prices was --

Q. Yes.

A. -- as you pointed out, less than a tick per thousand contracts.

Q. But again, let's go back to that table 8, panel A.

A. Uh-huh.

Q. What does this show? I mean, what is, in English, what does a "coefficient" mean? What is a P value? What does this show?

A. So the question I'm trying to go after and the reason I did this analysis is to assess what Mr. Moncada's actual trading was around the time that he submitted his large orders. So the technique is a regression analysis. I don't know if you want to go deeply into that or not.

Q. I don't want to, but I think I have to. (Laughter)

A. So regression analysis, I think I used the phrase in the text, is arguably the most widely-used statistical tool, I think I said in finance and economics. That's the branch of science that I'm most familiar with. I would not be surprised if it was also the most widely-used in other branches of science. It's just I don't read the journals in other areas as often.

Anyway, suffice it to say, it's an extremely widely used statistical technique for assessing the relationship between variables. In this case the variable that I was interested in quantifying was Mr. Moncada's actual trades, and I was interested in assessing the relationship between his large order entry and his actual trades. So that was the issue I was after.

Regression analysis was the tool that I used. The coefficients are estimates of the average statistical association. So he's entering large trades. I wish to quantify the association between large trades entered -- I'm sorry, I said "trades entered" and I should be saying "orders entered" -- large orders entered and what actual trades occurred simultaneously and subsequently. The coefficient estimates are based on the statistical technique of the best estimate of the relationship between his orders entered and his subsequent trades.

Q. Okay. So let's just translate that to a hypothetical, if we can. If he places a large lot order to buy for 200, and subsequently, within 10 seconds, sells 10 contracts, what -- I mean, suppose that was the only transaction. What would the coefficient be?

A. So you said, in your example, it was an order of 200 and a trade of 10?

Q. Yeah. By the way, does it matter what the quantity is in your analysis?

A. I mean, quantities matter in the sense that the coefficient is per thousand, and again, I want to stress we're talking about on average in the data. Individual data points will differ. But the coefficient is per thousand, so if you want to estimate, say, typically how much did he trade, it would be the size of the orders in thousands times the coefficient to get an answer. So quantity matters in that sense.

Q. Okay, so if it was 200.

A. Okay. So 200, so the units I'm using is a thousand, so we'd multiply by 5. So sorry, give me your example again. He put in a 200 order and then traded how much the opposite direction?

Q. Ten.

A. Ten? So since I'm using units of 1,000 in terms of my numbers and your single example, if I'd applied my data to only that data point, it would have said 50 that he put in. He put in per thousand, because he put in 200 in your example, then traded ten in the opposite direction. So per thousand, he's

trading 50 the opposite direction.

Q. Okay. And what does the coefficient of minus .59 tell you? Let's do it this way. Suppose he puts in -- let's say he puts in a large lot order. Let's make it easy. Let's say 1,000, okay?

A. Uh-huh.

Q. Okay. What would that tell you his average trade in the opposite direction would be in the ensuing 10 seconds or in the same 10 seconds?

A. The same 10 seconds, just about half a contract. 1,000, the hypothetical here, a 1,000 contract buy order, on average, in the same 10 seconds he sold half a contract.

Q. And if he put in 1,000 contract buy order in the next 10 seconds, you would expect that it might be slightly over one contract that he would purchase and sell in the opposite direction?

A. It's a little more complicated than that, because I've also got the 10 seconds later effect here.

Q. So it's cumulative?

A. It's cumulative.

Q. So if you took the same 10 seconds and the next 10 seconds, it would be about one?

A. Well, getting close to two, because if I

understand your hypothetical, it's a 1,000 contract buy order in a given 10 seconds followed by another 1,000 contract buy order in the next 10 seconds?

Q. No, no, no. A 1,000 contract buy order, what would happen over the same 10 seconds plus the next 10 seconds?

A. Oh, okay. So this data says that on average, if you combine current and next 10 seconds, he has sold 1.1 contracts.

Q. Okay. Now, if instead of 1,000, I mean, there were very few -- there were no orders for 1,000, were there?

A. I don't recall offhand.

Q. Typically it would be 200, 400, something like that?

A. I'm thinking 500 might have the biggest, but this is by memory and a little loose.

Q. So let's say 500. Over the same 10 seconds, how many contracts would you have expected him to trade in the opposite direction?

A. In the same 10 seconds?

Q. Yeah, same 10 seconds.

A. Only about a quarter of a contract in the same 10 seconds.

Q. And in the same 10 seconds -- sorry -- in

the same 10 seconds plus the next 10 seconds, how many contracts would you expect him to trade in the opposite direction?

A. About one, and you're using the word "expect." Again, this is an average.

Q. I understand.

A. It wouldn't have been that case every incident. But on average, per 500 contracts, he's trading about one the opposite direction in the same and subsequent 10 seconds.

Q. Okay. And the price change per that contract would be one-tenth of a penny?

A. I mean, the estimate of his effect on the price was in the vicinity of a tenth of a penny; correct.

Q. Now --

A. Per thousand.

Q. I understand. Now I understand panel A is cumulative; correct?

A. Correct.

Q. But just eyeballing it, it looks like most of his trading in the opposite direction occurred well after a minute after he placed the large lot order; correct?

A. That's correct.

Q. And by far most of them?
A. Indeed. It's out 10 minutes, 30 minutes, 60 minutes later that we see the largest cumulative trading in the opposite direction.
Q. And you never quantified the effect on the market of these large lot orders that far out?
A. What do you mean "that far out"? In terms of did his orders affect prices 60 minutes out?
Q. Yes.
A. Yeah. The data, there's just not enough information in the data to reliably say what he did to prices that far out.
Q. Understood. So coming back to the text on page 4, you have a lot of -- you discuss what happens within 2 minutes, within 10 minutes, within 30 minutes, within 60 minutes. Do you see that?
A. Yes.
Q. But you have no information as to whether those trades in the opposite direction benefitted from any price change associated with his large lot orders?
A. That's correct. My assessment of his effect on the market shows short-term effects. I cannot say whether he affected the market that far out.

Q. And the bulk of his trading in the opposite direction was not short-term. It was more than a minute after?

A. Correct.

MR. ASCHE: This might actually be a good time for a five-minute break.

(Recess)

Q. (By Mr. Asche) On paragraph 10 of your report --

A. Yes.

Q. -- you note that he accounted for 6.1 percent of total executions against large lot orders. Do you see that?

A. Yes.

Q. Would you characterize that as a substantial amount of trading? Just the executed large lot orders.

A. I mean, "substantial" is a subjective word. You know, he was, in general, an active trader, and I believe we quantified the exact number of contracts that were traded against his large lot orders. You know, is that substantial or is that insubstantial is a little subjective. There's a specific number in the report.

Q. Well, on page 11 you talk about his

cancellations. I'm sorry, paragraph 11, forgive me.
A. Okay.
Q. You discuss his cancellation rate at 99.6 percent of the large orders?
A. Yes.
Q. Do you report in here what his cancellation rate was on other orders?
A. Yes, it is quantified.
Q. Where is that?
A. I'm just looking to see if it's in the text. If not, we can go to the tables.
MR. RIDNOUR: Paragraph 16.
THE WITNESS: Yes, exactly. So he cancelled 51.5 percent of his small lot CBOT orders.
Q. (By Mr. Asche) And without knowing more, would you expect that there would be a higher cancellation rate of large lot orders than the smaller orders?
A. You know, if you just came to me and said, "Do you think people cancel more large orders or small orders," I would not have a firm opinion on that. It could depend on a lot of things, like how motivated are they to get executed? Which I don't know. In the markets in general, you know, do the people who put in large orders do that because

they're more motivated to get executed? That would matter also. Anyway, my answer is that I don't know how that would go in general.

Q. You do have -- you do reflect the cancellation rate of large lot orders for non-Moncada traders, traders other than Moncada.

A. Yes, I did. I did quantify that.

Q. About 20 percent; is that right?

A. We can look. I'm finding, in paragraph 15: "On the eight charge dates, other participants cancelled only 28.7 percent of their large lot orders," yes.

Q. Did you compare cancellations of non-large lot orders among other participants? That is the market in general.

A. Yes. That's here somewhere as well.

Q. Okay.

A. Do you want to find the specific number? It's in the table. I don't recall if I mentioned it in the text. We can find it in the table if you wish.

Q. Yes.

A. So table 3, Order Entry and Cancellation. This is CBOT. So small lot orders not EM4. EM4 was in the data to identify Moncada, so that's the order

we're interested in. Looks like small lot orders by other than Moncada, 70 percent were cancelled.

Q. Okay. So the market in general, it cancelled small lot orders at a rate of 70-plus percent and large lot orders at only 28 percent?

A. Yeah. The number is 29 percent, 28.7 percent on the charge dates, 36 percent in the broader sample.

Q. Okay. In terms of actual number of contracts traded by Moncada, what percentage, if you recall, during this period that you studied, what percentage of actual trades, contracts traded, were the result of large lot orders?

A. I believe I may have that number. Let's have a look. There's a lot of numbers in this report.

Q. Yes.

A. So table 2 has some market shares. So in the middle of table 2 we have CBOT's total order entry. It was 10,380,000 contracts. Large lots were 1.3 million contracts. I'm sorry, your specific question was?

Q. This table doesn't, I don't think, address my question. My question was looking at Moncada's trading, not the market, what percentage of contracts

he actually traded were the result of large lot orders.

A. Let me see what we've got here. I'm not sure that percentage is here, but I think the data, I think the data is here. So he traded --

Q. Oh, I see. So he traded 6,000 large lot orders?

A. He traded 6,000 contracts off of his large lot orders.

Q. And 50,000 small lot orders?

A. And 50,000 off of the small lot orders, correct.

Q. Over what period of time?

A. So okay, it's indicated here on the table. This is August 13th to November 30th, 2009. This is on CBOT. I think originally you were looking for a percentage. Looks like it would be about 11 percent. About 11 percent of his total trading came off of his large lot orders.

Q. Okay. And each contract was worth, on average, how much; do you recall?

A. No, I don't. We'd have to go back. I'd have to refresh my memory as to how many bushels were involved and then multiply it by price. So I don't have that readily at hand.

Q. Well, do you know how much bushels are involved in a contract?

A. I'm thinking it was 1,000, but I'm going by memory. These are the sort of things that I have to look up every time I return to the data.

Q. Okay.

A. It is in the report somewhere, I believe, if we need to verify it now.

Q. Let me just ask you, then, eyeballing table 2, is it fair to say that the percentage -- that, first of all, that Moncada's percentage of all CBOT large lot orders -- which was 6.1 percent; is that correct?

A. If we're talking about his trades, his share of the trades generated by large orders.

Q. Yes, 6.1 percent?

A. Yes.

Q. His -- but his total share of the CBOT is 1.9 percent, in terms of trades?

A. I believe that's correct, yes.

Q. So his -- relative to the rest of the market, he did relatively more trading in large lot orders than would be expected by his share of the total market?

A. He did much less trading than you would

expect, given his share of the order entry. He did more trading than you would expect, based on his share of overall trading.

Q. And looking at his -- the number of contracts, large lot orders, traded versus small lot orders traded, his percentage of about 10.7 percent was significantly higher than the percentage of large lot orders traded by the rest of the market; is that correct?

MR. RIDNOUR: Objection. Can you clarify that question?

MR. ASCHE: Yes, I'll try. I'll try.

MR. RIDNOUR: Okay.

MR. ASCHE: I know I'm not -- (laughter)

MR. RIDNOUR: I was in the same boat yesterday. I understand.

Q. (By Mr. Asche) His large lot executed contracts represented 10.7 percent of his total executed contracts; correct?

A. That's correct, yes.

Q. That percentage is significantly lower than the rest of the market?

A. I'm not sure if we have that number for the rest of the market.

Q. Well, if you have -- the number of large

lot orders which were not Moncada was 92,797?
A. Correct.
Q. And the number of small lot orders which were not Moncada is 2,867,056; correct?
A. That's correct.
Q. Looking at table 2.
A. Yeah. Again, clarifying, these are trades from those orders.
Q. Yes. So the rest of the market had a much lower percentage of large lot trades executed than Moncada?
A. Yeah, because they submitted so many less.
Q. Well --
A. I mean, he submitted most of the market's large orders, so I guess it's not surprising that even with his low execution rate, he ended up with -- he ended up with a fair number of executions despite his low execution rate because the quantity submitted was so large.
Q. And it's certainly predictable to him that if he entered a large number of large lot orders, he would end up with a fair number of executions?
MR. RIDNOUR: Objection; calls for speculation as to someone else's intent.
MR. ASCHE: I don't know. I'm asking. If

he can't answer it, he can say that.

A. I mean, I don't know. I don't know what was predictable to him. You know, perhaps he thought he could do this and not execute any. I don't know if that's what he thought. In any event, he did execute some.

Q. (By Mr. Asche) Well, if he executed some, he would know that some would be executed; correct?

A. Certainly after the fact he would know. What he expected going on is harder to say.

Q. And this took place over a period of three months.

A. Yeah. I mean, I studied about three months, yes.

Q. So did the number of large lot orders diminish over time?

A. I'm not sure I can give you the exact answer to that.

Q. Did the number of large lot orders which resulted in trades diminish over time?

A. I'm not sure that I tracked that through time. I mean, in general, if you're going to put in large orders at competitive prices, you should expect some executions.

Q. So he was at risk; correct?

A. Oh, yeah. Whatever his strategies were, there was risk, absolutely.

Q. And again, when you compare Moncada's rate of cancellation with the rest of the market, it does not -- you have no way of knowing whether the rest of the market resorts to modifications as opposed to cancellations?

A. I did not quantify their modifications of large orders.

Q. Okay. By the way, do you know what the CBOT's rules were with respect to priority of orders in October of 2009?

A. I've seen a couple of documents that describe their algorithms.

Q. What documents have you seen?

A. I'm not sure I could give you the names, the names of the documents.

Q. Well, when did you see them?

A. I saw one document back in March, give or take, and another one more recently.

Q. Do you still have those?

A. In some form. Not with me.

Q. No, I understand. Do you recall what the priority rules were?

A. The rule that I recall being described was

first, the party who was first to establish a price had priority on I believe it was up to 100 contracts, after which there was a pro rata allocation, sharing with other contracts at the same price. As I recall, they rounded down in that pro rata, which then left a little bit left over, and that little bit left over went to the person who was first at the price. That's my recollection of the description I saw.

Q. So it was essentially a three-step priority?

A. As I understand it, yes.

Q. And if there were more than 100 shares -- contracts traded, if one trader entered an order for 500 shares and the rest of the market combined entered an order for 500 shares, he would get half the available, assuming he would get half the available contracts over 100?

A. I think it's a little more -- yeah, I think it's a little more complicated than that. But in general, there would be sharing of the order across the various parties that had the same price.

Q. But the larger a party's order, the higher his pro rata share; correct?

A. Assuming that the incoming order was big enough --

Q. Yes.
A. -- to get beyond the 100 that was allocated to the first one.
Q. Yeah.
A. Yeah, then a large order would get a larger pro rata share, based on my understanding of their rules.
Q. Now, if a trader places and immediately cancels a large lot order on a frequent basis, is that pattern obvious to the market?
MR. RIDNOUR: Objection; calls for speculation.
MR. ASCHE: He can say he doesn't know.
A. I don't know what would be obvious to the market. They would -- if one was paying attention, one could observe a pattern of large order entry and cancellation.
Q. (By Mr. Asche) And it's generally a good idea for traders in commodities to pay attention?
A. In general, yes.
Q. And certainly if that pattern was occurring over a three-month period, even a trader who's not paying attention would be likely to notice it; correct?
MR. RIDNOUR: Again, objection; calls for

speculation.
A. Yeah. I mean, you know, I don't want to mince words with you, but if they really weren't paying attention, maybe they wouldn't. Let's just say that an older trader should notice a pattern of this type.
Q. (By Mr. Asche) Right. Did you track whether there was any trend in the effect on market price from the beginning of the period you studied to the end of the period you studied?
A. I did not.
Q. So you don't know whether there was a more exaggerated price difference at the beginning than the end?
A. Were the effects bigger at the beginning, lower at the end? I do not have any direct evidence on that.
Q. Now, if other traders -- in paragraph 24 you say: "Other traders' large lot order were placed further from the BBO." And BBO means what?
A. Best bid or offer.
Q. And you say: "Other traders' large lot orders were placed further from the BBO on average."
A. Yeah, that's correct.
Q. Wouldn't that be a factor in determining